

App. No. 10/822,312  
Amendment Dated: January 16, 2007  
Reply to Final Office Action of November 14, 2006

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REMARKS/ARGUMENTS

The claims have been amended as set forth above. Claims 5-6, and 16-17 are cancelled.  
No new matter has been added.

I. Examiner Interview Dated January 4, 2007

An interview with Examiner Botts was held on January 4, 2007. During that interview amendments that would move prosecution forward were discussed. In particular, the combination of claims 1, 5 and 6 was discussed. Also, an amendment that would include features of the target indicator was discussed. The claims have been amended accordingly in hopes of moving prosecution over the cited references. If Examiner Botts has any questions or comments regarding this response, applicants would welcome further discussion via telephone.

II. Rejection Under 35 U.S.C. 112

Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph. The Office Action asserts that the feature "receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction, mapping the second web link to the web diagram data structure..." does not comply with the written description requirement and is not enabled. Applicants respectfully disagree. The specification recites that "[a]s should be appreciated, at this point, only those web pages and/or links not requiring user interaction (e.g. link selection or data input) are parsed by the web diagramming module." *Specification*, at pg. 12, lines 5-8. This statement is not contrary to the language of the claims. It is at this point in the described method that the links not requiring user interaction are parsed and mapped. This statement does not preclude the later described steps where a user interaction is received and then those accessed web links and their dependents are parsed and mapped. See *Specification*, pg. 11, line 18 - pg. 14, line 13.

III. Rejection Under 35 U.S.C. 103(a)

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,035,330 issued to Astiz et al. (hereinafter "Astiz"). Applicants respectfully disagree with

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the rejection. Claims 5-6, and 16-17 are cancelled. Independent claims 1, 12 and 18 have been amended to clarify features of the claims that distinguish Astiz.

Independent claim 1 has been amended to include the following combination of features that are not taught or otherwise suggested by Astiz:

receiving a selected web site;

automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction, wherein parsing the selected web site includes at least one member of a group comprising: automatically parsing the web site to a specified maximum number of links, and automatically parsing the web site to a specified maximum number of discovery levels;

mapping the selected web site and parsed web links to a web diagram data structure;

receiving a selection of a first web link from the parsed web links as a starting point for browsing a path through the selected web site;

mapping the first web link to the web diagram data structure;

receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction;

mapping the second web link to the web diagram data structure; and

creating and displaying a web diagram from the web diagram data structure showing a diagram node for each of the selected web site, the parsed web links subordinate to the selected web site not requiring user interaction, and the selected second web link.

Applicants assert that the above combination of features is not taught or otherwise suggested by the cited reference. Claim 1 recites that combination of "automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction", "receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction", and "creating and displaying a web diagram from the web diagram data structure showing a diagram node for each of the selected web site, the parsed web links subordinate to the selected web site not requiring user interaction, and the selected second web link." Astiz teaches a web site mapping system. The web site map may include

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external hyperlinks. *Astiz*, at col. 10, line 50. With regard to selection of the external hyperlink, *Astiz* teaches that "[i]f the user selects an external hyperlink which is connected to another web site, the user may decide to view a web site map of that additional site either as a new map window or a separate but simultaneously displayed map window superimposed on part of the browser display." *Astiz*, at col. 10, lines 50-54. *Astiz* teaches a mapping of the hyperlinks in their entirety. In the main embodiment of *Astiz*, *Astiz* teaches pre-generated mappings and the detrimental features of mappings that are not pre-generated. See *Astiz*, col. 8, lines 33-55. The specification of the current disclosure recites that "[a]dvantageously, the diagramming functionality combines both automated mapping and diagramming for navigation levels selected for expanded mapping and for mapping of individual web page/link addresses to which the user manually navigates through some type of interaction through the hosted web browser." The features of claims 1 allow this advantage to be realized. *Astiz* does not address such an advantage because the maps are pregenerated.

Moreover, claim 1 has been amended to clarify that "wherein parsing the selected web site includes at least one member of a group comprising: automatically parsing the web site to a specified maximum number of links, and automatically parsing the web site to a specified maximum number of discovery levels." The Office Action states that this feature would have been obvious in view of *Astiz*. Applicants agree that it would be advantageous to limit the scope of the mapping as recited in the Office Action. However, there is no motivation to modify *Astiz* in the manner suggested by claim 1. Specifically, *Astiz* already limits the scope of the mapping by limiting the mapping by location of the link (e.g. by association with a particular site or location on a particular server.) In that *Astiz* already provides a manner of limiting the scope of the mapping, there is no teaching or suggestion to further limit the scope of mapping, much less in the manner suggested by claim 1. Applicants assert that improper hindsight is being used to modify *Astiz* in the manner propounded. Accordingly, applicants respectfully request reconsideration of claim 1.

Independent claim 12 has been amended to include the following combination of features that are not taught or otherwise suggested by *Astiz*:

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displaying a diagram of a structure of a selected web site, the diagram including diagram nodes for the selected web site and for web links associated with the selected web site;

receiving a selection of a first web link from the diagram;

in response to the selection of the first web link in the diagram, opening the first web link;

determining whether an expand target indicator is actuated in association with the first web link;

when the expand target indicator is not actuated in association with the first web link, automatically updating the displayed diagram to add a diagram node for a selected second web link whereby the diagram node for the selected second web link is added to the diagram in a position illustrating a relationship of the selected second web link to other nodes in the diagram; and

when the expand target indicator is actuated in association with the first web link, automatically updating the displayed diagram to add a diagram node for web links associated with the first web link whereby the diagram nodes are added to the diagram in positions illustrating relationships to other nodes in the diagram.

The Background of the current application recites a few problems associated with the prior art as follows:

Unfortunately, such automatic systems are limited to diagramming only those portions of a site that can be accessed without user interaction. For example, an automated web site diagramming system cannot navigate through a page or link requiring user input, such as a password, or user selection, such as selection or entry of a search term. If a diagram of such areas of a web site is needed by a user, then the automated diagram is of little use to the user. For example, the user may navigate a web site of a book ordering company. The particular search path used by the user for finding books of interest may require input of search terms at many levels of searching. A mapping and diagramming of the general web site structure without a mapping and diagramming of the search path followed by the user is not very useful to the user. In addition, such systems often diagram a web site according to a wider scope than is needed by the user. Such systems typically follow every web page and link that may be parsed without user interaction and are only limited by the number of links and the depth of path specified by the user. *Background*, at pg 1, line 23 - pg. 2, line 7.

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The Detailed Description of the current application recites a few advantages of the current application as follows:

The "Expand Target" check box 735 allows the user to expand discovery or search to all web pages and/or links available under the presently selected web page and/or link. Selection of an expanded search causes the web diagramming module 210 to perform an automated web site parsing and diagramming of all web pages and/or links contained at the present discovery level (presently selected web page and/or link) traversed by the user. Thus, a combination of manual selective navigation as caused by the user and an automated web diagramming of all web pages and/or links at a given level may be performed. For example, if desired, the user may obtain a web site mapping and diagram of a navigation course where a single web page or link is diagrammed at a first discovery (navigation or search) level, followed by a diagramming of all web pages and/or links contained on a next discovery level (expanded target mapping for this level), followed by a diagramming of only two selected web pages and/or links of yet a third discovery level, and so on. Accordingly, the user may obtain a web diagram of those web pages and/or links to which the user navigates and of any web pages or links associated with particular web pages or links to which the user navigates. *Specification*, at pg. 13, line 28 - pg. 14, line 13.

At decision block 340, a determination is made as to whether the user has selected expanded mapping. If not, the routine proceeds to block 350 and only those links selected at any traversed discovery level are mapped to the data structure for display in a web diagram. If the user has selected expanded mapping, the routine proceeds to block 345 and all links at a given traversed discovery level are mapped to the data structure. *Specification*, at pg. 15, lines 11-16.

Advantageously, the diagramming functionality combines both automated mapping and diagramming for navigation levels selected for expanded mapping and for mapping of individual web page/link addresses to which the user manually navigates through some type of interaction through the hosted web browser. The resulting web diagram is tailored to the web site navigation and mapping desires of the user and allows for diagramming of web pages/links only accessible after manual navigation actions by the user. *Specification*, at pg. 17, lines 9-15.

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Applicants assert that Astiz does not teach or otherwise suggests the combination of features recited in independent claim 12. Astiz teaches a web site mapping system. The web site map may include external hyperlinks. *Astiz*, at col. 10, line 50. With regard to selection of the external hyperlink, Astiz teaches that "[i]f the user selects an external hyperlink which is connected to another web site, the user may decide to view a web site map of that additional site either as a new map window or a separate but simultaneously displayed map window superimposed on part of the browser display." *Astiz*, at col. 10, lines 50-54. Astiz teaches a mapping of the hyperlinks in their entirety. In the main embodiment of Astiz, Astiz teaches pre-generated mappings and the detrimental features of mappings that are not pre-generated. See *Astiz*, col. 8, lines 33-55. Applicants can find no teaching or suggestion of "determining whether an expand target indicator is actuated in association with the first web link." Also, applicants can find no teaching in Astiz that "when the expand target indicator is not actuated in association with the first web link, automatically updating the displayed diagram to add a diagram node for a selected second web link whereby the diagram node for the selected second web link is added to the diagram in a position illustrating a relationship of the selected second web link to other nodes in the diagram." Moreover, applicants can find no teaching or suggestion in Astiz that "when the expand target indicator is actuated in association with the first web link, automatically updating the displayed diagram to add a diagram node for all web links associated with the first web link whereby the diagram nodes are added to the diagram in positions illustrating relationships to other nodes in the diagram." Again, Astiz teaches associating the entire mapping with the external link (the navigator is not given a mapping choice while navigating). See *Astiz*, at col. 10, lines 50-54; col. 13, lines 6-10. Accordingly, applicants believe that independent claim 12 is allowable.

Independent claim 18 has been amended to include the following combination of features that are not taught or otherwise suggested by Astiz:

automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction, wherein parsing the selected web site includes at least one member of a group comprising: automatically parsing the web site to a specified maximum number of links, and automatically parsing the web site to a specified maximum number of discovery levels;

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mapping the selected web site and parsed web links to a web diagram data structure;

receiving a selection of a first web link from the parsed web links as a starting point for browsing a path through the selected web site;

mapping the first web link to the web diagram data structure;

receiving a selection of a second web link subordinate to the first web link, the second web link requiring user data input;

mapping the second web link to the web diagram data structure after input of the user data; and

creating and displaying a web diagram from the web diagram data structure showing a diagram node for the selected web site, each of the parsed web links subordinate to the selected web site not requiring user interaction, and for the selected second web link.

Applicants assert that the above combination of features is not taught or otherwise suggested by the cited reference. Claim 18 recites that combination of "automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction", "receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction", and "creating and displaying a web diagram from the web diagram data structure showing a diagram node for each of the selected web site, the parsed web links subordinate to the selected web site not requiring user interaction, and the selected second web link." *Astiz* teaches a web site mapping system. The web site map may include external hyperlinks. *Astiz*, at col. 10, line 50. With regard to selection of the external hyperlink, *Astiz* teaches that "[i]f the user selects an external hyperlink which is connected to another web site, the user may decide to view a web site map of that additional site either as a new map window or a separate but simultaneously displayed map window superimposed on part of the browser display." *Astiz*, at col. 10, lines 50-54. *Astiz* teaches a mapping of the hyperlinks in their entirety. In the main embodiment of *Astiz*, *Astiz* teaches pre-generated mappings and the detrimental features of mappings that are not pre-generated. See *Astiz*, col. 8, lines 33-55. The specification of the current disclosure recites that "[a]dvantageously, the diagramming

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functionality combines both automated mapping and diagramming for navigation levels selected for expanded mapping and for mapping of individual web page/link addresses to which the user manually navigates through some type of interaction through the hosted web browser." The features of claims 18 allow this advantage to be realized. Astiz does not address such an advantage.

Moreover, claim 18 has been amended to clarify that "wherein parsing the selected web site includes at least one member of a group comprising: automatically parsing the web site to a specified maximum number of links, and automatically parsing the web site to a specified maximum number of discovery levels." The Office Action states that this feature would have been obvious in view of Astiz. Applicants agree that it would be advantageous to limit the scope of the mapping as recited in the Office Action. However, there is no motivation to modify Astiz in the manner suggested by claim 18. Specifically, Astiz already limits the scope of the mapping by limiting the mapping by location of the link (e.g. by association with a particular site or location on a particular server.) In that Astiz already provides a manner of limiting the scope of the mapping, there is no teaching or suggestion to further limit the scope of mapping, much less in the manner suggested by claim 18. Applicants assert that improper hindsight is being used to modify Astiz in the manner propounded. Accordingly, applicants respectfully request reconsideration of claim 18.

With regard to the dependent claims, they include features not taught or otherwise suggested by the cited references. Moreover, the dependent claims ultimately depend from the independent claims. As such, they are thought allowable for at least the same reasons set forth above.

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**IV. Request for Reconsideration**

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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